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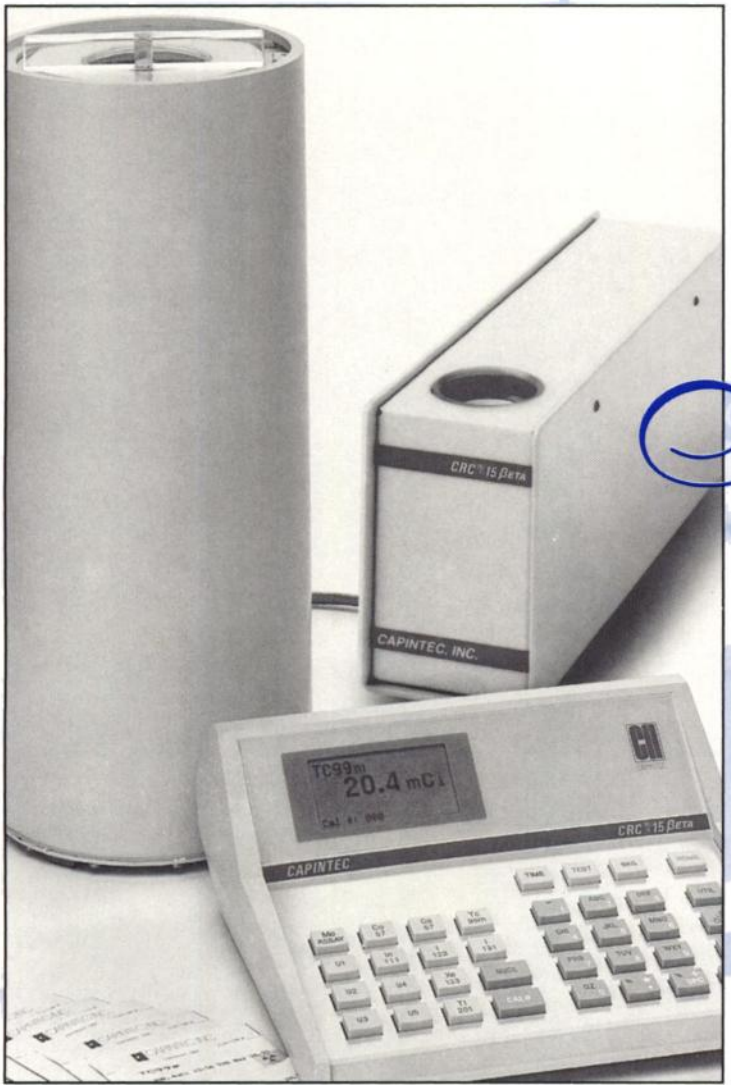
Circle Reader Service No. 181

Gamma+Beta... and Counting

Calibration to the Power of 2



Gamma and Beta Dose Calibration Combined in One System

The CRC®-15 βETA combines a gamma and a beta counting calibrator which satisfies all your calibrating needs. Instead of having multiple pieces of equipment for each calibration, CRC®-15 βETA gives you both gamma and beta counting all in one. For standard gamma counting, use the deep-well pressurized ion chamber; and for counting Sr-89, P-32 or other high energy beta nuclides, use the special thin NaI crystal detector. All you need to do is simply push a key that switches the readout between detectors. This allows for greater accuracy while saving time by utilizing a single system for all your dose calibration requirements.

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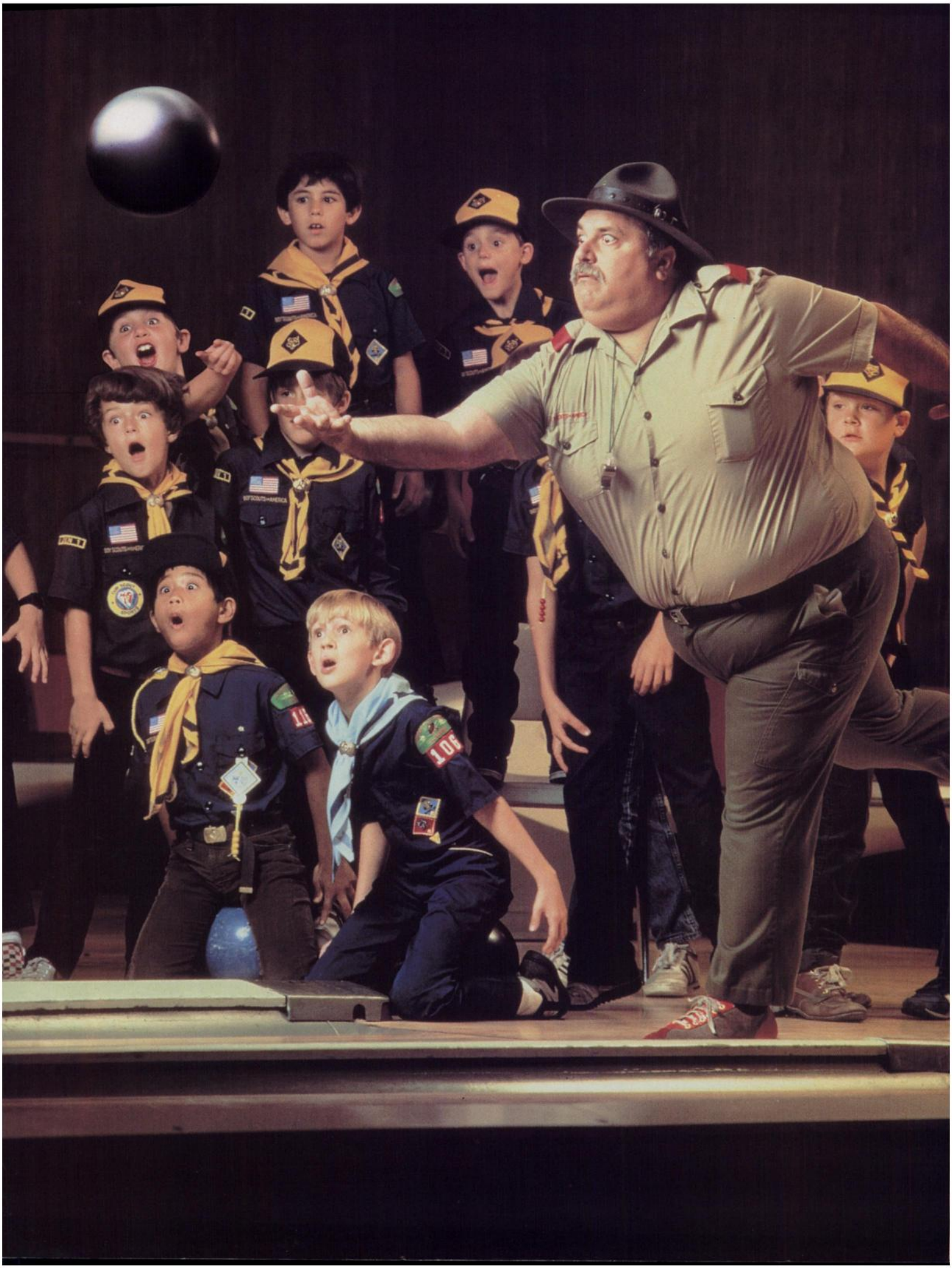


The perfect form for Cardiolite®

In myocardial perfusion imaging, his form may produce images that are considered technically inadequate because of soft-tissue attenuation.

That's where Cardiolite comes through, especially for female and large-chested or obese male patients. The higher photon energy (140 keV) provides greater anatomical detail that can enhance interpretive confidence—and may reduce false-positives and equivocal cases.

Cardiolite also offers the unique advantage of direct measurement of both myocardial perfusion and ventricular function from one study.

So the next time you're faced with imaging female and large-chested or obese male patients, use Cardiolite and reduce soft-tissue attenuation.

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

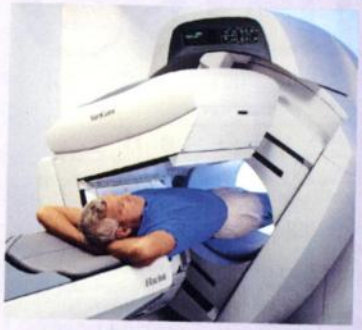
To reduce soft-tissue attenuation Cardiolite comes through

DU PONT
PHARMA
Radiopharmaceuticals

Stress testing should be performed only under the supervision of a qualified physician in a laboratory equipped with appropriate resuscitation and support apparatus. There have been infrequent reports of signs and symptoms consistent with seizure and severe hypersensitivity after administration of Tc99m Sestamibi.

Please see brief summary of prescribing information on adjacent page.

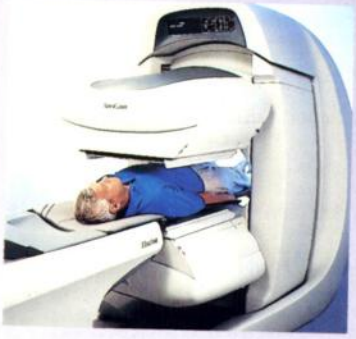
VariCam



Get an angle on the future...

All-Digital, High-Energy Imaging

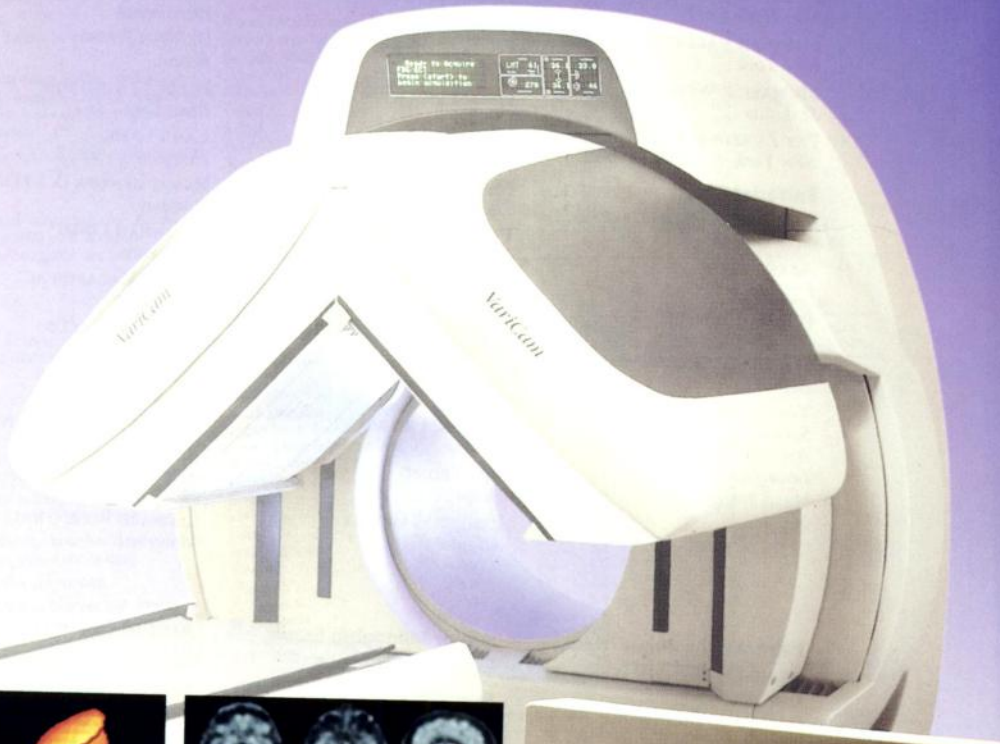
- ❑ Designed for coincidence detection (work-in-progress)
- ❑ Leading in High-Energy Imaging
- ❑ TransACT™: Transmission Attenuation Corrected Tomography

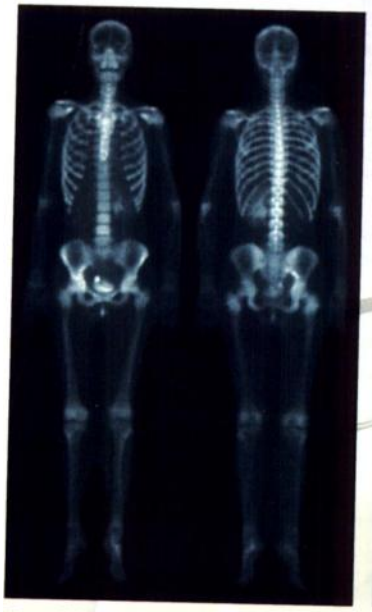


Robotic Design, Convertible Geometry

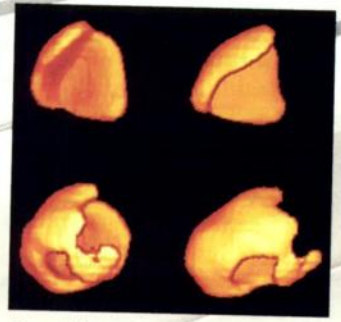
- ❑ EleGantry™: Truly open, variable-angle (180°/90°) detector geometry
- ❑ OptiTrack™: Real-time fully automatic body-contoured scanning
- ❑ Evolving-Images™ with Slip-Ring technology

*SPECT studies performed by gamma cameras using positron emitting isotopes (511 keV) are not cleared by the FDA. Images presented demonstrate clinical results obtained in investigational studies.

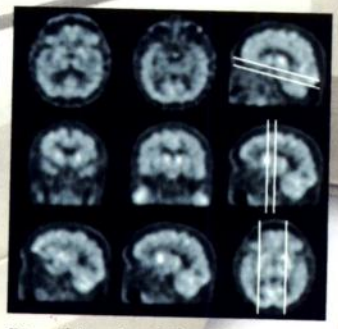




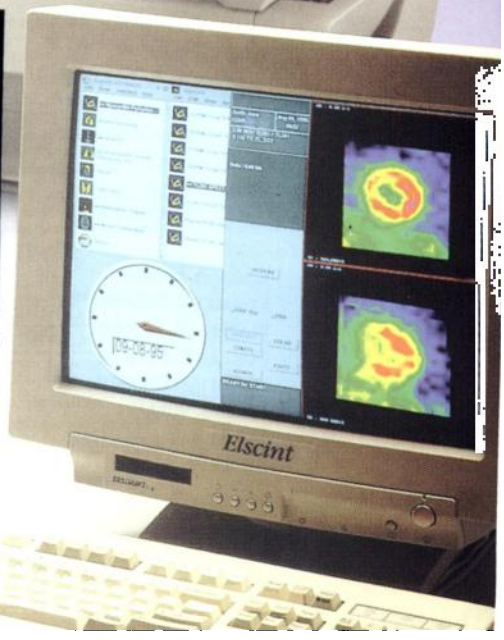
Double-efficiency *Whole-Body scan, featuring superior lesion detectability with OptiTrack real-time body contouring.*



Double-efficiency *right-angle cardiac tomography: simultaneous dual-isotope FDG/MIBI SPECT.**



Double double-efficiency *ultra-flared fan-beam NeuroScintigraphy.*



Elscint

Circle Reader Service No. 42

Elscint U.S.A.: (201) 342-2020; 1-800-ELSCINT

Brief Summary

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

FOR DIAGNOSTIC USE

DESCRIPTION: Each 5ml vial contains a sterile, non-pyrogenic, lyophilized mixture of:
Tetrakis (2-methoxy isobutyl isonitrile) Copper (I) tetrafluoroborate - 1.0mg
Sodium Citrate Dihydrate - 2.6mg
L-Cysteine Hydrochloride Monohydrate - 1.0mg
Mannitol - 20mg
Stannous Chloride, Dihydrate, minimum ($SnCl_2 \cdot 2H_2O$) - 0.025mg
Stannous Chloride, Dihydrate, ($SnCl_2 \cdot 2H_2O$) - 0.075mg
Tin Chloride (Stannous and Stannic) Dihydrate, maximum (as $SnCl_2 \cdot 2H_2O$) - 0.086mg

Prior to lyophilization the pH is 5.3-5.9. The contents of the vial are lyophilized and stored under nitrogen.

This drug is administered by intravenous injection for diagnostic use after reconstitution with sterile, non-pyrogenic, oxidant-free Sodium Pertechnetate Tc99m Injection.The pH of the reconstituted product is 5.5 (5.0-6.0). No bacteriostatic preservative is present.

The precise structure of the technetium complex is $Tc99m[MIBI]_6^+$ where MIBI is 2-methoxy isobutyl isonitrile.

INDICATIONS AND USAGE: CARDIOLITE®, Kit for the Preparation of Technetium Tc99m Sestamibi is a myocardial perfusion agent that is useful in the evaluation of ischemic heart disease. CARDIOLITE®, Kit for the Preparation of Technetium Tc99m Sestamibi is useful in distinguishing normal from abnormal myocardium and in the localization of the abnormality, in patients with suspected myocardial infarction, ischemic heart disease or coronary artery disease. Evaluation of ischemic heart disease or coronary artery disease is accomplished using rest and stress techniques.

CARDIOLITE®, Kit for the Preparation of Technetium Tc99m Sestamibi is also useful in the evaluation of myocardial function using the first pass technique.

Rest-exercise imaging with Tc99m Sestamibi in conjunction with other diagnostic information may be used to evaluate ischemic heart disease and its localization.

In clinical trials, using a template consisting of the anterior wall, inferior-posterior wall and isolated apex, localization in the anterior or inferior-posterior wall in patients with suspected angina pectoris or coronary artery disease was shown. Disease localization isolated to the apex has not been established. Tc99m Sestamibi has not been studied or evaluated in other cardiac diseases.

It is usually not possible to differentiate recent from old myocardial infarction or to differentiate recent myocardial infarction from ischemia.

CONTRAINDICATIONS: None known.

WARNINGS: In studying patients in whom cardiac disease is known or suspected, care should be taken to assure continuous monitoring and treatment in accordance with safe, accepted clinical procedure. Infrequently, death has occurred 4 to 24 hours after Tc99m Sestamibi use and is usually associated with exercise stress testing (See Precautions).

PRECAUTIONS:

GENERAL

The contents of the vial are intended only for use in the preparation of Technetium Tc99m Sestamibi and are not to be administered directly to the patient without first undergoing the preparative procedure.

Radioactive drugs must be handled with care and appropriate safety measures should be used to minimize radiation exposure to clinical personnel. Also, care should be taken to minimize radiation exposure to the patients consistent with proper patient management.

Contents of the kit before preparation are not radioactive. However, after the Sodium Pertechnetate Tc99m Injection is added, adequate shielding of the final preparation must be maintained.

The components of the kit are sterile and non-pyrogenic. It is essential to follow directions carefully and to adhere to strict aseptic procedures during preparation.

Technetium Tc99m labeling reactions involved depend on maintaining the stannous ion in the reduced state. Hence, Sodium Pertechnetate Tc99m Injection containing oxidants should not be used.

Technetium Tc99m Sestamibi should not be used more than six hours after preparation.

Radiopharmaceuticals should be used only by physicians who are qualified by training and experience in the safe use and handling of radionuclides and whose experience and training have been approved by the appropriate government agency authorized to license the use of radionuclides.

Stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate resuscitation and support apparatus.

The most frequent exercise stress test endpoints, which resulted in termination of the test during controlled Tc99m Sestamibi studies (two-thirds were cardiac patients) were:

Fatigue	35%
Dyspnea	17%
Chest Pain	16%
ST-depression	7%
Arrhythmia	1%

Carcinogenesis, Mutagenesis, Impairment of Fertility

In comparison with most other diagnostic technetium labeled radiopharmaceuticals, the radiation dose to the ovaries (1.5rads/30mCi at rest, 1.2 rads/30mCi at exercise) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry subsection in DOSAGE AND ADMINISTRATION section.)

The active intermediate, $[Cu(MIBI)_4]BF_4$, was evaluated for genotoxic potential in a battery of five tests. No genotoxic activity was observed in the Ames, CHO/HPRT and sister chromatid exchange tests (all *in vitro*). At cytotoxic concentrations (≥ 20μg/ml), an increase in cells with chromosome aberrations was observed in the *in vitro* human lymphocyte assay. $[Cu(MIBI)_4]BF_4$ did not show genotoxic effects in the *in vivo* mouse micronucleus test at a dose which caused systemic and bone marrow toxicity (9mg/kg, > 600 × maximal human dose).

Pregnancy Category C

Animal reproduction and teratogenicity studies have not been conducted with Technetium Tc99m Sestamibi. It is also not known whether Technetium Tc99m Sestamibi can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. There have been no studies in pregnant women. Technetium Tc99m Sestamibi should be given to a pregnant woman only if clearly needed.

Nursing Mothers

Technetium Tc99m Pertechnetate is excreted in human milk during lactation. It is not known whether Technetium Tc99m Sestamibi is excreted in human milk. Therefore, formula feedings should be substituted for breast feedings.

Pediatric Use

Safety and effectiveness in children below the age of 18 have not been established.

ADVERSE REACTIONS: During clinical trials, approximately 8% of patients experienced a transient parosmia and/or taste perversion (metallic or bitter taste) immediately after the injection of Technetium Tc99m Sestamibi. A few cases of transient headache, flushing, edema, injection site inflammation, dyspepsia, nausea, vomiting, pruritus, rash, urticaria, dry mouth, fever, dizziness, fatigue, dyspnea, and hypotension also have been attributed to administration of the agent. Cases of angina, chest pain, and death have occurred (see Warnings and Precautions). The following adverse reactions have been rarely reported: signs and symptoms consistent with seizure occurring shortly after administration of the agent; transient arthritis in a wrist joint; and severe hypersensitivity, which was characterized by dyspnea, hypotension, bradycardia, asthenia and vomiting within two hours after a second injection of Technetium Tc99m Sestamibi.

DOSAGE AND ADMINISTRATION: The suggested dose range for I.V. administration in a single dose to be employed in the average patient (70kg) is:

370-1110MBq (10-30mCi)

The dose administered should be the lowest required to provide an adequate study consistent with ALARA principles (see also PRECAUTIONS).

When used in the diagnosis of myocardial infarction, imaging should be completed within four hours after administration.

The patient dose should be measured by a suitable radioactivity calibration system immediately prior to patient administration. Radiochemical purity should be checked prior to patient administration.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration whenever solution and container permit.

Store at 15-25°C before and after reconstitution.

RADIATION DOSIMETRY: The radiation doses to organs and tissues of an average patient (70kg) per 1110MBq (30mCi) of Technetium Tc99m Sestamibi injected intravenously are shown in Table 4.

Table 4. Radiation Absorbed Doses from Tc99m Sestamibi

	Estimated Radiation Absorbed Dose			
	REST			
	2.0 hour void		4.8 hour void	
Organ	rads/ 30mCi	mGy/ 1110MBq	rads/ 30mCi	mGy/ 1110MBq
Breasts	0.2	2.0	0.2	1.9
Gallbladder Wall	2.0	20.0	2.0	20.0
Small Intestine	3.0	30.0	3.0	30.0
Upper Large Intestine Wall	5.4	55.5	5.4	55.5
Lower Large Intestine Wall	3.9	40.0	4.2	41.1
Stomach Wall	0.6	6.1	0.6	5.8
Heart Wall	0.5	5.1	0.5	4.9
Kidneys	2.0	20.0	2.0	20.0
Liver	0.6	5.8	0.6	5.7
Lungs	0.3	2.8	0.3	2.7
Bone Surfaces	0.7	6.8	0.7	6.4
Thyroid	0.7	7.0	0.7	6.8
Ovaries	1.5	15.5	1.6	15.5
Testes	0.3	3.4	0.4	3.9
Red Marrow	0.5	5.1	0.5	5.0
Urinary Bladder Wall	2.0	20.0	4.2	41.1
Total Body	0.5	4.8	0.5	4.8
	STRESS			
	2.0 hour void		4.8 hour void	
Organ	rads/ 30mCi	mGy/ 1110MBq	rads/ 30mCi	mGy/ 1110MBq
Breasts	0.2	2.0	0.2	1.8
Gallbladder Wall	2.8	28.9	2.8	27.8
Small Intestine	2.4	24.4	2.4	24.4
Upper Large Intestine Wall	4.5	44.4	4.5	44.4
Lower Large Intestine Wall	3.3	32.2	3.3	32.2
Stomach Wall	0.5	5.3	0.5	5.2
Heart Wall	0.5	5.6	0.5	5.3
Kidneys	1.7	16.7	1.7	16.7
Liver	0.4	4.2	0.4	4.1
Lungs	0.3	2.6	0.2	2.4
Bone Surfaces	0.6	6.2	0.6	6.0
Thyroid	0.3	2.7	0.2	2.4
Ovaries	1.2	12.2	1.3	13.3
Testes	0.3	3.1	0.3	3.4
Red Marrow	0.5	4.6	0.5	4.4
Urinary Bladder Wall	1.5	15.5	3.0	30.0
Total Body	0.4	4.2	0.4	4.2

Radiopharmaceutical Internal Dose Information Center, July, 1990, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831, (615) 576-3449.

HOW SUPPLIED: Du Pont Radiopharmaceuticals' CARDIOLITE®, Kit for the Preparation of Technetium Tc99m Sestamibi is supplied as a 5ml vial in kits of two (2), five (5) and thirty (30) vials, sterile and non-pyrogenic.

Prior to lyophilization the pH is between 5.3-5.9. The contents of the vials are lyophilized and stored under nitrogen. Store at 15-25°C before and after reconstitution. Technetium Tc99m Sestamibi contains no preservatives. Included in each two (2) vial kit are one (1) package insert, six (6) vial shield labels and six (6) radiation warning labels. Included in each five (5) vial kit are one (1) package insert, six (6) vial shield labels and six (6) radiation warning labels. Included in each thirty (30) vial kit are one (1) package insert, thirty (30) vial shield labels and thirty (30) radiation warning labels.

The U.S. Nuclear Regulatory Commission has approved this reagent kit for distribution to persons licensed to use byproduct material pursuant to section 35.11 and section 35.200 of Title 10 CFR Part 35, to persons who hold an equivalent license issued by an Agreement State, and, outside the United States, to persons authorized by the appropriate authority.

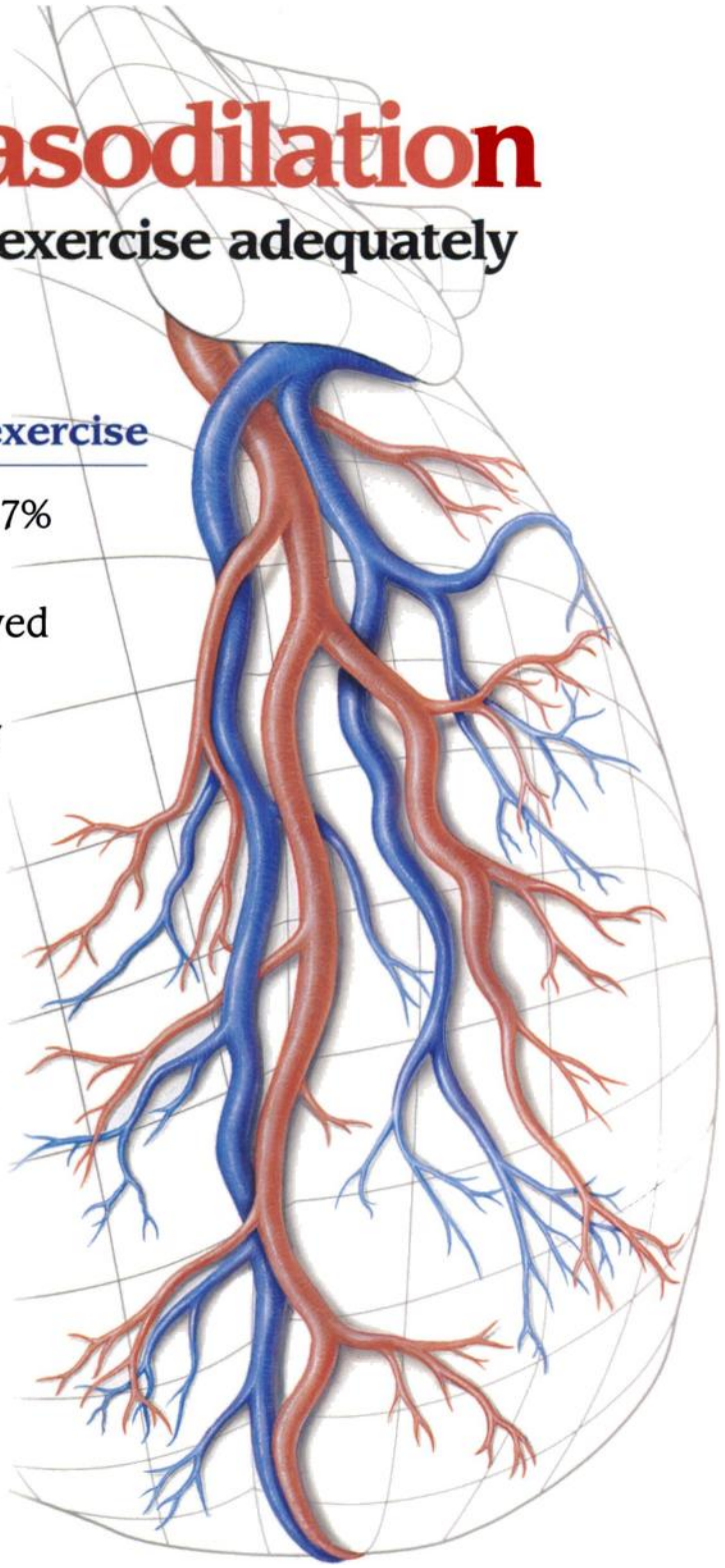
DU PONT PHARMA
Radiopharmaceuticals

Marketed by
Du Pont Radiopharmaceutical Division
The Du Pont Merck Pharmaceutical Co.
331 Treble Cove Road
Billerica, Massachusetts, USA 01862

513121-0394
Brief Summary
3/94 Printed in U.S.A.

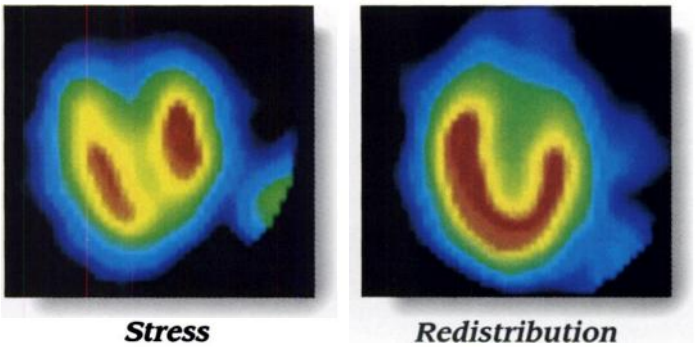
Maximal Vasodilation

for patients unable to exercise adequately



Imaging comparable to maximal exercise

- Interpretable images obtained in 98.7% of patients[1]
- Maximal coronary hyperemia achieved in 2-3 minutes
- No supplemental exercise necessary



Stress *Redistribution*

Rapid onset, short duration

- <10-second half-life minimizes post-infusion monitoring time
- Side effects usually resolve quickly

ADENOSCAN®

adenosine

Please see brief summary of prescribing information on adjacent page for warnings, precautions and contraindications.

Fujisawa

1. Cerquiera MD, Verani MS, Schwaiger M, et al. Safety profile of adenosine stress perfusion imaging: results from Adenoscan multicenter trial registry. *J Am Coll Cardiol.* 1994;23:384-389.

BRIEF SUMMARY

ADENOSCAN®
adenosine

For Intravenous Infusion Only

DESCRIPTION

Adenosine is an endogenous nucleoside occurring in all cells of the body. It is chemically 6-amino-9-beta-D-ribofuranosyl-9-H-purine.

Adenosine is a white crystalline powder. It is soluble in water and practically insoluble in alcohol. Solubility increases by warming and lowering the pH of the solution.

Each Adenoscan vial contains a sterile, non-pyrogenic solution of adenosine 3 mg/mL and sodium chloride 9 mg/mL in Water for Injection, q.s. The pH of the solution is between 4.5 and 7.5.

INDICATIONS AND USAGE:

Intravenous Adenoscan is indicated as an adjunct to thallium-201 myocardial perfusion scintigraphy in patients unable to exercise adequately. (See **WARNINGS**).

CONTRAINDICATIONS:

Intravenous Adenoscan (adenosine) should not be administered to individuals with:

1. Second- or third-degree AV block (except in patients with a functioning artificial pacemaker).
2. Sinus node disease, such as sick sinus syndrome or symptomatic bradycardia (except in patients with a functioning artificial pacemaker).
3. Known or suspected bronchoconstrictive or bronchospastic lung disease (e.g., asthma).
4. Known hypersensitivity to adenosine.

WARNINGS:

Fatal Cardiac Arrest, Life Threatening Ventricular Arrhythmias, and Myocardial Infarction.

Fatal cardiac arrest, sustained ventricular tachycardia (requiring resuscitation), and nonfatal myocardial infarction have been reported coincident with Adenoscan infusion. Patients with unstable angina may be at greater risk.

Sinoatrial and Atrioventricular Nodal Block

Adenoscan (adenosine) exerts a direct depressant effect on the SA and AV nodes and has the potential to cause first-, second- or third-degree AV block, or sinus bradycardia. Approximately 6.3% of patients develop AV block with Adenoscan, including first-degree (2.9%), second-degree (2.6%) and third-degree (0.8%) heart block. All episodes of AV block have been asymptomatic, transient, and did not require intervention. Adenoscan can cause sinus bradycardia. Adenoscan should be used with caution in patients with pre-existing first-degree AV block or bundle branch block and should be avoided in patients with high-grade AV block or sinus node dysfunction (except in patients with a functioning artificial pacemaker). Adenoscan should be discontinued in any patient who develops persistent or symptomatic high-grade AV block. Sinus pause has been rarely observed with adenosine infusions.

Hypotension

Adenoscan (adenosine) is a potent peripheral vasodilator and can cause significant hypotension. Patients with an intact baroreceptor reflux mechanism are able to maintain blood pressure and tissue perfusion in response to Adenoscan by increasing heart rate and cardiac output. However, Adenoscan should be used with caution in patients with autonomic dysfunction, stenotic valvular heart disease, pericarditis or pericardial effusions, stenotic carotid artery disease with cerebrovascular insufficiency, or uncorrected hypovolemia, due to the risk of hypotensive complications in these patients. Adenoscan should be discontinued in any patient who develops persistent or symptomatic hypotension.

Hypertension

Increases in systolic and diastolic pressure have been observed (as great as 140 mm Hg systolic in one case) concomitant with Adenoscan infusion; most increases resolved spontaneously within several minutes, but in some cases, hypertension lasted for several hours.

Bronchoconstriction

Adenoscan (adenosine) is a respiratory stimulant (probably through activation of carotid body chemoreceptors) and intravenous administration in man has been shown to increase minute ventilation (Ve) and reduce arterial PCO_2 causing respiratory alkalosis. Approximately 28% of patients experience breathlessness (dyspnea) or an urge to breathe deeply with Adenoscan. These respiratory complaints are transient and only rarely require intervention.

Adenosine administered by inhalation has been reported to cause bronchoconstriction in asthmatic patients, presumably due to mast cell degranulation and histamine release. These effects have not been observed in normal subjects. Adenoscan has been administered to a limited number of patients with asthma and mild to moderate exacerbation of their symptoms has been reported. Respiratory compromise has occurred during adenosine infusion in patients with obstructive pulmonary disease. Adenoscan should be used with caution in patients with obstructive lung disease not associated with bronchoconstriction (e.g., emphysema, bronchitis, etc.) and should be avoided in patients with bronchoconstriction or bronchospasm (e.g., asthma). Adenoscan should be discontinued in any patient who develops severe respiratory difficulties.

PRECAUTIONS:

Drug Interactions

Intravenous Adenoscan (adenosine) has been given with other cardioactive drugs (such as beta adrenergic blocking agents, cardiac glycosides, and calcium channel blockers) without apparent adverse interactions, but its effectiveness with these agents has not been systematically evaluated. Because of the potential for additive or synergistic depressant effects on the SA and AV nodes, however, Adenoscan should be used with caution in the presence of these agents. The vasoactive effects of Adenoscan are inhibited by adenosine receptor antagonists, such as alkylxanthines (e.g., caffeine and theophylline). The safety and efficacy of Adenoscan in the presence of these agents has not been systematically evaluated. The vasoactive effects of Adenoscan are potentiated by nucleoside transport inhibitors, such as dipyridamole. The safety and efficacy of Adenoscan in the presence of dipyridamole has not been systematically evaluated. Whenever possible, drugs that might inhibit or augment the effects of adenosine should be withheld for at least five half-lives prior to the use of Adenoscan.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Studies in animals have not been performed to evaluate the carcinogenic potential of Adenoscan (adenosine). Adenosine was negative for genotoxic potential in the Salmonella (Ames Test) and Mammalian Microsome Assay.

Adenosine, however, like other nucleosides at millimolar concentrations present for several doubling times of cells in culture, is known to produce a variety of chromosomal alterations. In rats and mice, adenosine administered intraperitoneally once a day for five days at 50, 100, and 150 mg/kg [10-30 (rats) and 5-15 (mice) times human dosage on a mg/M^2 basis] caused decreased spermatogenesis and increased numbers of abnormal sperm, a reflection of the ability of adenosine to produce chromosomal damage.

Pregnancy Category C

Animal reproduction studies have not been conducted with adenosine; nor have studies been performed in pregnant women. Because it is not known whether Adenoscan can cause fetal harm when administered to pregnant women, Adenoscan should be used during pregnancy only if clearly needed.

Pediatric Use

The safety and effectiveness of Adenoscan in patients less than 18 years of age have not been established.

ADVERSE REACTIONS:

The following reactions with an incidence of at least 1% were reported with intravenous Adenoscan among 1421 patients enrolled in controlled and uncontrolled U.S. clinical trials. Despite the short half-life of adenosine, 10.6% of the side effects occurred not with the infusion of Adenoscan but several hours after the infusion terminated. Also, 8.4% of the side effects that began coincident with the infusion persisted for up to 24 hours after the infusion was complete. In many cases, it is not possible to know whether these late adverse events are the result of Adenoscan infusion.

Flushing	44%	Gastrointestinal discomfort	13%	Second-degree AV block	3%
Chest discomfort	40%	Lightheadedness/dizziness	12%	Paresthesia	2%
Dyspnea or urge to breathe deeply	28%	Upper extremity discomfort	4%	Hypotension	2%
Headache	18%	ST segment depression	3%	Nervousness	2%
Throat, neck or jaw discomfort	15%	First-degree AV block	3%	Arrhythmias	1%

Adverse experiences of any severity reported in less than 1% of patients include:

Body as a Whole: back discomfort; lower extremity discomfort; weakness.

Cardiovascular System: nonfatal myocardial infarction; life-threatening ventricular arrhythmia; third-degree AV block; bradycardia; palpitation; sinus exit block; sinus pause; sweating; T-wave changes, hypertension (systolic blood pressure > 200 mm Hg).

Central Nervous System: drowsiness; emotional instability; tremors.

Genital/Urinary System: vaginal pressure; urgency.

Respiratory System: cough.

Special Senses: blurred vision; dry mouth; ear discomfort; metallic taste; nasal congestion; scotomas; tongue discomfort.

OVERDOSAGE:

The half-life of Adenosine is less than 10 seconds and side effects of Adenoscan (when they occur) usually resolve quickly when the infusion is discontinued, although delayed or persistent effects have been observed. Methylxanthines, such as caffeine and theophylline, are competitive adenosine receptor antagonists and theophylline has been used to effectively terminate persistent side effects. In controlled U.S. clinical trials, theophylline (50-125 mg slow intravenous injection) was needed to abort Adenoscan side effects in less than 2% of patients.

DOSAGE AND ADMINISTRATION:

For intravenous infusion only.

Adenoscan should be given as a continuous peripheral intravenous infusion.

The recommended intravenous dose for adults is 140 mcg/kg/min infused for six minutes (total dose of 0.84 mg/kg).

The required dose of thallium-201 should be injected at the midpoint of the Adenoscan infusion (i.e., after the first three minutes of Adenoscan). Thallium-201 is physically compatible with Adenoscan and may be injected directly into the Adenoscan infusion set.

The injection should be as close to the venous access as possible to prevent an inadvertent increase in the dose of Adenoscan (the contents of the IV tubing) being administered. There are no data on the safety or efficacy of alternative Adenoscan infusion protocols.

The safety and efficacy of Adenoscan administered by the intracoronary route have not been established.

Note: Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration.

CAUTION: Federal law prohibits dispensing without prescription.

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In HAMA*-negative patients
with colorectal or recurrent ovarian adenocarcinoma

NOW Indicated for Repeat Administration

ONCOSCINT® CR/OV

Satumomab Pendetide (1 mg/2 mL)

A tumor-targeted
road map
to monitor and stage cancer

- For presurgical staging to plan or potentially alter the operative approach[1]
- Assists in planning individual treatment before surgery[1]
- Helps define the prognosis related to the stage of disease
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For further information call 1-800-833-3533

CYTOGEN

ONCOSCINT® CR/OV
Satumomab Pendetide (1 mg/2 mL)

*Human antimurine antibody.

Please see brief summary of prescribing information on adjacent page.

OncoScint® CR/OV Kit (satumomab pendetide)

Kit for the Preparation of Indium In 111 satumomab pendetide
For Intravenous Use Only

Brief Summary of Prescribing Information

INDICATIONS AND USAGE
OncoScint® CR/OV-In (indium In 111 satumomab pendetide) is a diagnostic imaging agent that is indicated for determining the extent and location of extrahepatic malignant disease in patients with known colorectal or ovarian cancer. Clinical studies suggest that this imaging agent should be used after completion of standard diagnostic tests when additional information regarding disease extent could aid in patient management. The diagnostic images acquired with OncoScint® CR/OV-In should be interpreted in conjunction with a review of information obtained from other appropriate tests.
OncoScint® CR/OV-In is also indicated for re-administration to HAMA-negative patients who are at risk of recurrence. Ordering physicians should be aware that HAMA-positive patients have alterations in the biodistribution of the radioimmunoconjugate and in the quality of imaging. Therefore it is vital that before any repeat use of OncoScint® CR/OV-In HAMA levels should be determined in pre-infusion sera. The results should be evaluated with respect to the patient's clinical situation and the guidelines below should be followed.
Repeat OncoScint® CR/OV-In should not be given to persons whose HAMA level is > 400 ng/mL because of the possibility of infusional reactions, and uniformly altered biodistribution and poor quality images. In general, if HAMA values are < 50 ng/mL most subjects will image normally. Altered biodistribution may occur in 3-4% (3/80 samples) of cases for unknown reasons unrelated to HAMA level. If HAMA values are between 50 and 400 ng/mL there is a higher incidence of subjects who will show altered biodistribution (7/13 samples) and uninformative imaging; in this range the frequency of HAMA interference with imaging has yet to be determined.
OncoScint® CR/OV-In is not indicated as a screening test for ovarian or colorectal cancer.
Administration of OncoScint® CR/OV-In may result in falsely elevated values from in vitro immunoassays, including tests for carcinoembryonic antigen (CEA) and CA 125. Because this interference may persist for months, the clinical laboratory should investigate for assay interference in patients who develop elevated CEA or CA 125 subsequent to imaging with OncoScint® CR/OV-In (see *Drug/Laboratory Test Interactions*).

In HAMA*-negative patients with colorectal or recurrent ovarian adenocarcinoma

ONCOSCINT® CR/OV
Satumomab Pendetide (1mg/2mL)

A tumor-targeted road map to monitor and stage cancer

Please refer to complete prescribing information before using **OncoScint CR/OV.**

CONTRAINDICATIONS
OncoScint® CR/OV-In (indium In 111 satumomab pendetide) should not be used in patients who are hypersensitive to this or any other product of murine origin or to indium In 111 chloride.

WARNINGS
Allergic reactions, including anaphylaxis, can occur in patients who receive murine antibodies. Although serious reactions of this type have not been observed in clinical trials after OncoScint® CR/OV-In (indium In 111 satumomab pendetide) administration, medications for the treatment of hypersensitivity reactions should be available during administration of this agent.

PRECAUTIONS
General The components of the kit are sterile and pyrogen free and contain no preservative. OncoScint® CR/OV-In (indium In 111 satumomab pendetide) should be used within 8 hours after radiolabeling. It is essential to follow the directions for preparation carefully and to adhere to strict aseptic procedures during preparation of the radiolabeled product.
Each OncoScint® CR/OV kit is a unit of use package. The contents of the kit are to be used only to prepare OncoScint® CR/OV-In; unlabeled OncoScint® CR/OV should NOT be administered directly to the patient. After radiolabeling with indium-111, the entire OncoScint® CR/OV-In dose must be administered to the patient for whom it was prescribed. **Reducing the dose of either component may adversely impact imaging results, and, therefore, is not recommended.**
The contents of the kit are not radioactive. However, after the indium In 111 chloride is added, appropriate shielding of OncoScint® CR/OV-In must be maintained. Care should be taken to minimize radiation exposure to patients and medical personnel, consistent with proper hospital and patient management procedures.
In addition, radiopharmaceuticals should be used only by physicians and other professionals who are qualified by training and experience in the safe use and handling of radionuclides.

Information for Patients Murine monoclonal antibodies are foreign proteins, and their administration can induce human anti-murine antibodies (HAMA). While limited data exist concerning the clinical significance of HAMA, the presence of HAMA may interfere with murine-antibody based immunoassays, could compromise the efficacy of diagnostic or therapeutic murine antibody-based agents, and may increase the risk of adverse reactions. For these reasons, patients should be informed that the use of this product could affect the future use of other murine-based products, including OncoScint® CR/OV-In, and should be advised to discuss prior use of murine-antibody based products with their physicians.
OncoScint® CR/OV-In has been shown to induce HAMA to murine IgG after single administration in about 55% of patients in tumor imaging trials. HAMA levels became negative in one-third of such patients by 6 months after infusion.
While limited data exist concerning the clinical significance of HAMA, it is known that patients who develop persistently elevated serum HAMA levels have altered clearance and tissue biodistribution of MAbs. The efficacy of diagnostic or therapeutic murine antibody-based agents may be compromised in these patients.
When considering the administration of OncoScint® CR/OV-In to patients who have previously received murine antibody-based products, physicians should be aware of the potential for HAMA to alter clearance and biodistribution. The quality or sensitivity of the imaging study may be compromised. Therefore, prior to administration of murine antibodies, including OncoScint® CR/OV-In, the physician should review the patient history to determine whether the patient has previously received such products.
Prior to administration of OncoScint® CR/OV-In, patients who have previously received this or other murine antibody-based products should be tested for HAMA using approved methodology. Specialty Laboratories, Inc. (Santa Monica, California) has CYTOGEN approved methodology that measures HAMA by its ability to bridge between solid-phase murine antibody and soluble, radiolabeled murine antibody.
Clinical trials which utilize this methodology demonstrated that if serum HAMA levels are less than 50 ng/mL, there is a high probability of high image quality associated with the normal biodistribution of OncoScint® CR/OV-In. If HAMA levels are between 50 and 400 ng/mL the biodistribution of the agent is likely to be abnormal. If the serum HAMA level is greater than 400 ng/mL, repeat imaging studies should not be performed.
Instructions regarding the preparation and shipment of serum samples for HAMA testing can be obtained by contacting Specialty Laboratories 1-800-421-7110 (Fax 310-828-6634).

Drug/Laboratory Test Interactions The presence of HAMA in serum may interfere with two-site murine antibody-based immunoassays, including assays for carcinoembryonic antigen (CEA) and CA 125. When present, this interference generally results in falsely high values. If HAMA is known or suspected to be present, the clinical laboratory should be notified and appropriate measures taken to avoid this interference. These methods include the use of non-murine immunoassays, or HAMA removal by adsorption, blocking, or heat inactivation.
Carcinogenesis, Mutagenesis, Impairment of Fertility Long-term animal studies have not been performed to evaluate the carcinogenic or mutagenic potential of OncoScint® CR/OV-In or to evaluate its effect on fertility in males or females.
Pregnancy Category C Animal reproduction studies have not been conducted with OncoScint® CR/OV-In. It is also not known whether OncoScint® CR/OV-In can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. OncoScint® CR/OV-In should not be administered to a pregnant woman unless, in the opinion of the physician, the information to be gained outweighs the potential risks. MAb B72.3 has been shown to react with fetal gastrointestinal tissues.
In general, examinations using radiopharmaceuticals in women of childbearing potential should be performed during the first few days (approximately 10) following the onset of menses.

Nursing Mothers and/or Lactating Women It is not known whether OncoScint® CR/OV-In is excreted in human milk and, if so, for how long. Because many drugs are excreted in human milk, caution should be exercised when OncoScint® CR/OV-In is administered to a nursing woman. OncoScint® CR/OV-In has not been administered to lactating females and therefore should not be administered to nursing mothers unless, in the opinion of the physician, the information to be gained outweighs the potential risk. In such cases, formula feedings should be substituted for breast feedings.
Pediatric Use The safety and effectiveness of OncoScint® CR/OV-In in children have not been established.

ADVERSE REACTIONS
After administration of 1188 i.v. doses of OncoScint® CR/OV-In (indium In 111 satumomab pendetide) to 1041 patients in clinical trials, adverse reactions were observed in approximately 4% of patients. No deaths attributable to OncoScint® CR/OV-In administration were reported. The most common adverse reaction was fever, which occurred in approximately 1% of patients. Other adverse reactions, each of which occurred in less than 1% of patients, are listed in order of decreasing frequency: hypotension, hypertension, nausea, chills, rash, injection site reactions, pruritus, allergic reactions, sweating, abdominal pain, asthenia, chest pain, headache, hypothermia, pain, bradycardia, vasodilatation, diarrhea, arthralgia, confusion, dizziness, nervousness, crying, and angioedema. Although causality was not determined, an isolated occurrence of reversible thrombocytopenia was observed in a patient who received OncoScint® CR/OV-In in clinical trials.
The overall incidence of adverse reactions reported for repeat administration of OncoScint® CR/OV-In (4%) is similar to that observed after administration of single, initial doses. Of the adverse reactions listed above, two fevers, one report of abdominal pain, and two readily reversible hypersensitivity reactions characterized primarily by flank pain have been reported after repeat doses of OncoScint® CR/OV-In. The latter two patients had positive preinjection HAMA titers and a history of allergies.

OVERDOSAGE
The maximum amount of OncoScint® CR/OV-In (indium In 111 satumomab pendetide) that can be safely administered has not been determined. In clinical trials, single doses of 20 mg of OncoScint® CR/OV-In were administered to 64 patients with various types of epithelial carcinomas; the type and frequency of adverse reactions at this dose were similar to those observed with lower doses.

DOSAGE AND ADMINISTRATION
The dose of OncoScint® CR/OV (satumomab pendetide) is 1 mg radiolabeled with 5 mCi of indium In 111 chloride. Each dose is administered intravenously over 5 minutes and should not be mixed with any other medication during its administration. The patient dose of the radiolabel should be measured in a dose calibrator prior to administration.
Each OncoScint® CR/OV kit is a unit dose package. After radiolabeling with indium-111, the entire OncoScint® CR/OV-In dose should be administered to the patients. **Reducing the dose of either component may adversely impact imaging results, and is, therefore, not recommended.**

HOW SUPPLIED
The OncoScint® CR/OV kit (NDC No. 57902-640-01) for the preparation of indium-111 labeled OncoScint® CR/OV includes one vial containing 1 mg of satumomab pendetide per 2 mL of sodium phosphate buffered saline and one 2 mL vial of sodium acetate buffer solution, 0.5 *M*. These solutions are sterile and pyrogen free and contain no preservative. Each kit also includes one sterile 0.22 µm Millex® GV filter, prescribing information, and two identification labels.

Manufactured by:
CYTOGEN Corporation
Princeton, NJ

Revised 8/95

* Human antimurine antibody

References: 1. Doerr RJ, Abdel-Nabi H, Krag D, et al. Radiolabeled antibody imaging in the management of colorectal cancer: results of a multicenter clinical study. *Ann Surg.* 1991;214(2):118-124. 2. Data on file. Cytogen Corporation, Princeton, NJ.

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AUSTRALASIAN RADIOLOGY

ISSN 0004-8461

Editorial Policy: *Australasian Radiology* is the official journal of The Royal Australasian College of Radiologists, publishing articles of scientific excellence in radiology and radiation oncology. Manuscripts are judged on the basis of their contribution of original data and ideas or interpretation. The Journal publishes original papers, case studies and commissioned reviews in diagnostic radiology and radiation oncology.

Editorial Correspondence: Authors are invited to submit original articles in the following categories: Diagnostic Radiology, Radiation Oncology and Case Reports. Manuscripts should be submitted in triplicate (including figures and tables). Manuscripts and editorial correspondence should be addressed to: Professor F. John Palmer, Editor, *Australasian Radiology*, The Royal Australasian College of Radiologists, Level 9, 51 Druitt Street, Sydney, NSW 2000, Australia.

For full details of manuscript presentation, please fill in the order form for a copy of the Notice to Contributors.

Abstracting and Indexing Journals: This journal is indexed in *ADONIS, Biosis, Cambridge Scientific Abstracts, Current Clinical Cancer, Excerpta Medica, Index Medicus, Onco Disc* and *University Microfilms.*

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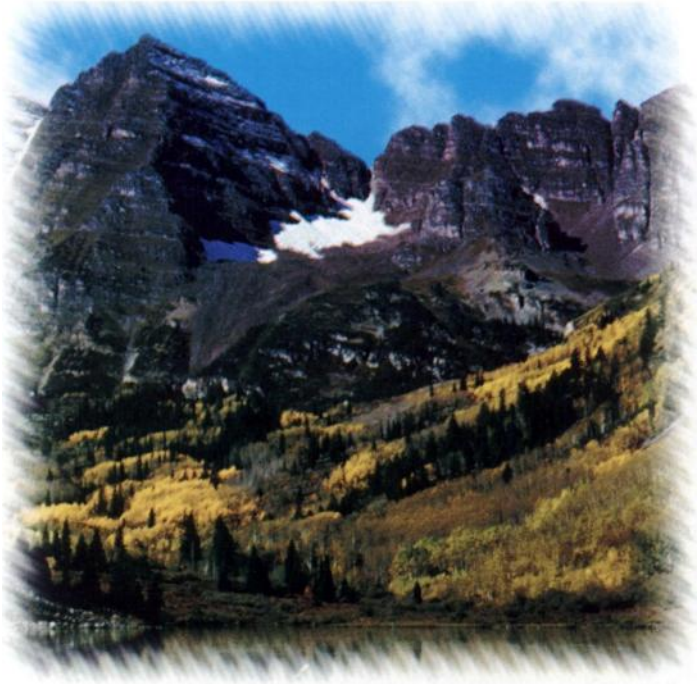

D E N V E R

Society of Nuclear Medicine 43rd Annual Meeting

Join more than 8000 of your colleagues in celebrating the 43rd Annual Meeting of the Society of Nuclear Medicine in Denver, Colorado, June 2-6, 1996. Participate in the intensive educational program, review posters, discuss the most recent developments with colleagues and join any of a host of much talked about extracurricular activities. Don't miss this opportunity to learn, mingle with your colleagues, and visit with exhibitors.

Continuing Education Courses

Refresher and state-of-the-art continuing education courses in chemistry, physics, quality assurance, cardiovascular nuclear medicine, PET, SPECT and NMR will supply up-to-the-minute approaches and procedures for all clinical settings.

Scientific Papers

This year's presentation of over 1000 scientific papers and posters include a distillation of the latest advancements and finest work achieved by outstanding scientists and physicians in the field of nuclear medicine. These papers, presented by the original authors, with over 30 subjects to choose from, will provide a unique opportunity for enhancing your knowledge or exploring new avenues in correlative areas of nuclear medicine. Ample time is allotted at these presentations for questions and discussions. An extensive display of scientific posters and exhibits will augment the presentation.

The ever-increasing importance of the role of nuclear medicine technologist will be explored in our Technologist Program, and over 70 hours of clinical updates will provide chief and staff technologists with the latest in basic, intermediate and advanced studies. This program will broaden expertise and enhance the technologist's contribution to nuclear medicine.

Exhibit

All the major manufacturers of nuclear medicine products and services, more than 100 in all, will be on hand to explain and demonstrate the most technologically-advanced equipment. Several companies will present User Meetings to give an in-depth understanding of their products.

If you need further information, please contact:
Society of Nuclear Medicine Department: Meeting Services
1850 Samuel Morse Drive, Reston, Virginia 22090
Phone: (703) 708-9000 Fax: (703) 708-9015

	Before April 29	*After April 29*
Physicians/Scientists		
Members	$180.00	$220.00
Nonmembers	275.00	295.00
Technologists		
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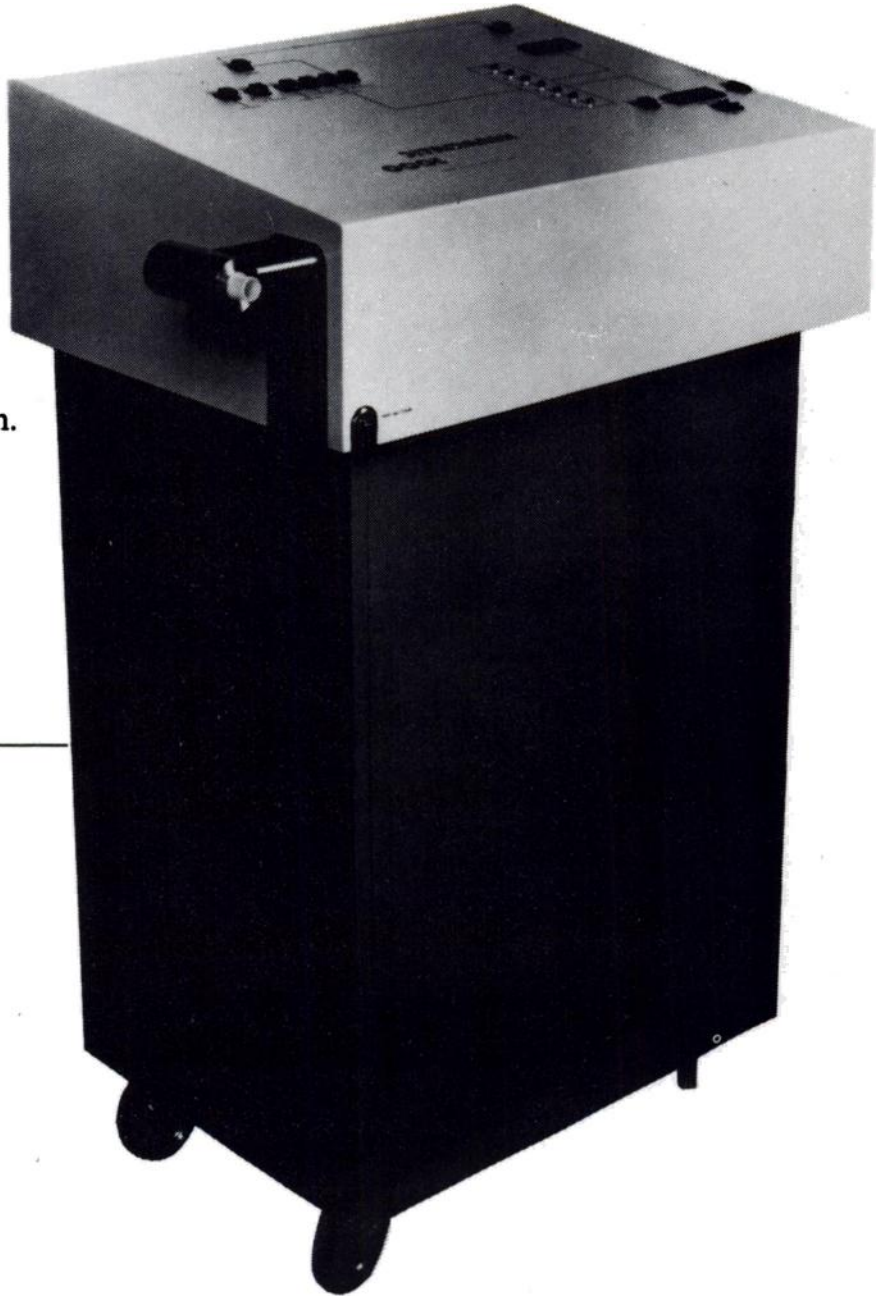

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NUCLEAR MEDICINE: 1896 1996 Centennial Celebration

100 YEARS IN THE MAKING

The year 1996 marks the 100th year after the discovery of radioactive nuclides. It is also the 50th year since the first shipment of radionuclides to civilians was made by the U.S. government. These events were milestones in the development of the diagnostic and therapeutic specialty we know today as Nuclear Medicine. To appropriately commemorate these major historical occurrences, the Society of Nuclear Medicine (SNM) is embarking on a **Centennial Celebration Program.**

This **Centennial Celebration Program** will offer us a vehicle to showcase our accomplishments and contributions in health care to congress, the media and the remainder of medicine. This is a celebration for the entire field, ranging from those in the research lab, through those caring for patients, to our industry. A number of special activities have been planned for this year. These include:

- A commemorative publication containing an illustrated history of nuclear medicine
- Media briefings on our history and how we benefit the nation
- A permanent time line exhibit of the significant events in nuclear medicine's history
- A corporate historical poster contest and display
- A special "Nuclear Medicine Week" poster

To support these events marking our history and preparing for our future, we are inviting you to participate by becoming a member of the **Centennial Honor Roll**. Participation is open to individuals, corporations (or corporate divisions), government agencies, chapters, professional societies, business leagues, and academic institutions. Honor Roll categories are defined below:

Platinum Honor Roll Member:
Corporations and all other organizations - $2,500 and above
Individuals - $500 and above
Gold Honor Roll Member:
Corporations and all other organizations - $500 to $2,499
Individuals - $200 to $499
Silver Honor Roll Member:
Corporations and all other organizations -$100 to $499
Individuals - $50 to $199

All contributors will be recognized on the special Honor Roll listing in the commemorative publication and on a poster at the entrance to the commercial exhibits area during the 1996 SNM Annual Meeting in Denver, Colorado this June.

For your name to appear in the commemorative publication, your contribution must be received by April 15, 1996.

Help us support our celebration of one of the most exciting 100 years in medicine. Join us today.

CENTENNIAL CONTRIBUTION FORM

Please complete and detach this card and send it with your tax deductible Centennial contribution to SNM.

Make checks payable to:
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To phone in your credit card contribution, call the SNM at 703-708-9000, ext 251.
By fax: 703-708-9015. Attn: Kristin Ludwig
Contribution Amount $ _____

Position Available

Chief, Section of Nuclear Medicine

The Department of Diagnostic Radiology, Yale University School of Medicine seeks applicants at the associate professor lever or higher for the position of Chief, Section of Nuclear Medicine. The qualified applicant must have demonstrated excellence in research, teaching and program administration. Please send CV to: Dr. Bruce McClennan, Chair Department of Diagnostic Radiology, Yale University School of Medicine, P.O. Box 208042, New Haven, CT 06520-8024. Yale University is an equal opportunity/affirmative action employer. Applications from women and minority group members are encouraged. Application deadline is: April 10, 1996.

Nuclear Medicine Fellowship

Unexpected opening in Nuclear Medicine fellowship program beginning July 1996. One or two year program leading to board eligibility. Full range of education including PET, radiopharmaceutical therapy, pediatrics and opportunities to do research. Applicants should have completed two years of an approved residency program. Apply: David E. Kuhl, MD, Division of Nuclear Medicine, University of Michigan Medical Center, 1500 E. Medical Center Drive, Ann Arbor, MI 48109-0028. Phone: 313-936-5388, Fax: 313-936-8182.

Postdoctoral Fellowship in PET/SPECT/fMRI Imaging

Unique opportunity for postdoctoral training in functional brain imaging research. Emphasis on psychopharmacology and neuropsychiatric imaging. Special training in quantification techniques, research method and clinical applications. Didactic lectures, variety of projects, excellent mix of clinical and basic research. MD or MD/PhD and clinical credentials required. Position to start JULY 1996 or earlier if possible. Send applications to: Dean F. Wong, MD, PhD, Johns Hopkins Medical Institutions, Radiology-JHOC Bldg. Room 3245, 601 N. Caroline Street, Baltimore, MD 21287-0807. E-mail: dfwong@rad.jhu.edu

PET Physicist

PET physicist for the department of nuclear medicine at the Technische Universitaet Muenchen. We are seeking a physicist/computer scientist specialized in biokinetic modeling. Experience in PET and possible MR is required. The applicants main research will focus on analysis of neurological PET data. In addition, he/she is expected to develop a modeling group and interact with faculty members of computer sciences and mathematics at the Technische Universitaet Muenchen. Applications/information: Markus Schwaiger, MD, Dept. of Nuclear Medicine, Technische Universitaet, Ismaninger Str. 22, 81675 Muenchen, Germany. Fax: ++49 89 41 40 48 41, Telephone: ++49 89 41 40 29 71.

Physician

Part-time/Locums: 100% NM hospital practice. Exc. Dept. Contact Dr. Cheng, 3118 Colyar Dr., Chattanooga, TN 37404. (423) 495-8736.

Position Wanted

Board certified nuclear medicine physician, board certified in internal medicine seeks new position. Well experienced in all aspect of nuclear medicine, especially nuclear cardiology. If interested, please respond to Box# 309, Society of Nuclear Medicine, 1850 Samuel Morse Drive, Reston, VA 22090-5316

Ivy trained Nuclear Medicine Fellow, BE ë96, seeks advanced PET Fellowship training. Research enthusiast, solid references, maintains extensive teaching and conference files. Please respond to: Box #304, Society of Nuclear Medicine, 1850 Samuel Morse Drive, Reston, VA 22090-5316.

ABNM certified physician, seeks FT/PT position. Vast experience as chief of service in administrative/clinical aspects of nuclear medicine, including therapies. Special interest in thyroidology and oncology. Please respond to: Box #306, Society of Nuclear Medicine, 1850 Samuel Morse Drive, Reston, VA 22090-5316.

Nuclear Medicine Tech - Job Wanted. Experienced, personable, hard working and reliable. (SPECT) B.S., MT (ASCP) NM, CNMT (NMTCB), and state licensed. Call (806) 374-3509.

Experienced ABNM certified physician seeks FT job. Dr. Garcia: (914) 778-2601.

The "Forschungszentrum Rossendorf" (FZR), a member of the "Wissenschaftsgemeinschaft Blaue Liste" (50% Saxonian and 50% federal funding) and located near Dresden engages about 600 scientists, engineers and support staff. It pursues research in the fields of Biomedicine-Chemistry, Materials Research and Nuclear Physics in close cooperation with the Dresden University of Technology and other research groups. More specifically, such work is conducted in the five institutes of the FZR: The Institute for Ion-Beam Physics, for Bioinorganic and Radiopharmaceutical Chemistry, for Radiochemistry, for Nuclear and Hadronic Physics and for Safety Research. The PET Center Rossendorf, medical division, is the object of a cooperation between the FZR and the University Hospital, Dresden University of Technology, a medical health care center with 23 medical departments, 16 institutes and a total of 1380 inpatients.

We are searching for a:

Scientist to be simultaneously appointed as **Chief of the Medical Division** at the PET-Center Rossendorf, Germany,
and
C3 Professor at the "Klinik und Poliklinik fur Nuklearmedizin", University Hospital, Dresden University of Technology, Germany.

The cooperation is aimed at the development and production of radiopharmaceuticals and their clinical application in PET. This challenge at the interface of natural science and medical application requires a specialist in nuclear medicine with the expertise in multidisciplinary research, creative scientific work in the clinical application and the methodology of PET-technology and radiation protection and includes the responsibility for a successful cooperation between the FZR and the University Hospital in PET-research.

Applications will be evaluated by a joint Search Committee with representatives of the University Hospital, Dresden University of Technology and the FZR Rossendorf. As required by German Law, the Committee explicitly encourages lady scientists and handicapped scientists to apply for the position.

Please forward curriculum vitae, certificates, a list of publications as well as a selection of revelant reprints and a brief outline of the scientific work until March 31, 1996, to the chairman of the Search Committee:

Prof. Dr. med. W.-G. Franke-Direktor der Klinik und Poliklinik fur Nuklearmedizin der Medizinischen Fakultaet der TU Dresden-Fetscherstrasse 74 - 01307 Dresden - Germany.

CALL FOR ABSTRACTS

Sixth Conference on Radioimmunodetection and Radioimmunotherapy of Cancer

October 10 - 12, 1996,
Princeton Marriott,
Princeton, New Jersey

Conference Chairmen:

David M. Goldenberg, Sc.D., MD, Center for Molecular Medicine and Immunology

Steven M. Larson, MD, Memorial Sloan-Kettering Cancer Center

Oral Papers and Posters on: Radiochemistry of antibodies and peptides • Radiation physics and dosimetry of radiolabeled antibodies and peptides • Radiation biology • Experimental targeting studies • Clinical studies of radioimmunodetection • Experimental and clinical radioimmunotherapy • New approaches to improved antibodies, peptides and targeting

Abstract Deadline: June 1, 1996

Registration: Before 6/15/1996, $475.00; $550.00 after 6/15/1996

For further information contact: Lois Gillespie, Center for Molecular Medicine and Immunology, One Bruce Street, Newark, NJ 07103. Telephone: (201) 982-4600; Fax: (201) 982-7047.

ANNOUNCING

The American Board of Science In Nuclear Medicine 1996 Certification Examination

The 1996 examination will be given Sunday, June 2, 1996 in Denver, Colorado, in conjunction with the 43rd Annual Meeting of the Society of Nuclear Medicine.

The examination is written and consists of two parts —

Part One (3.5 hours) assesses knowledge of basic aspects of Nuclear Medicine Science.

Part Two (2.5 hours) examines in depth the knowledge of a predetermined subspecialty area of the candidate's choice including:

- Nuclear Medicine Physics and Instrumentation
- Nuclear Pharmaceutical Science and Radiochemistry
- Radiation Protection

Completed Applications must be postmarked by March 15, 1996. The examination fee is $450 ($400 refundable if you do not qualify).

For applications and more information, please contact:
Joanna Wilson, Associate Coordinator
American Board of Science in Nuclear Medicine
c/o The Society of Nuclear Medicine
1850 Samuel Morse Drive, Reston, Virginia 22090-5316
Tel: (703) 708-9000, ext. 250 • Fax: (703) 708-9015

SMV

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As *SMV*, our combination of powerful resources and strong financing, underscored by $50 million in committed capital, enables us to continue building on this tradition of excellence. To better meet the needs of our customers, *SMV* offers the most diverse product line-up in nuclear medicine. We offer solutions for meeting the vast array of clinical and economic requirements, and support them with comprehensive customer service.

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